



July 20, 2010

Ms. Kimberly Tisa  
PCB Coordinator  
U.S. Environmental Protection Agency Region 1  
5 Post Office Square – Suite 100  
Boston, Massachusetts 02109-3912

Re: PCB Remediation Plan Modification Request  
Peabody Terrace Housing Facility – Buildings A, B, C, X  
900 Memorial Drive, Cambridge, Massachusetts

Dear Ms. Tisa:

On behalf of the President and Fellows of Harvard College (Harvard), Woodard & Curran has prepared this modification request to the Notification<sup>1</sup> prepared in accordance with 40 CFR 761.61(c) and approved by EPA on April 15, 2010.

The sequence of remediation work outlined in the Notification specifies that façade power washing is to occur after the removal and off-site disposal of PCB-containing exterior caulking, encapsulation of concrete joints, cleaning the inner returns of metal window frames, and the application of replacement caulking. Power washing is necessary to prepare the concrete façade for repairs (patching) and to apply the façade surface coating/encapsulant (Sikagard 670W). The sequence of work was written in this order with the intention of limiting the transfer of PCBs from existing caulking to the rinse water. However, based on recent pilot testing of the washing and collection methods and the Contractor's re-evaluation of the work sequencing (after initial implementation at Building A), a modification to the work sequence is being proposed to perform the power washing earlier in the sequence of work (prior to removing PCB caulking). This proposed sequence change would result in the ability to achieve project completion on a quicker schedule (thereby minimizing the time of disturbance to the occupants), and would have a higher likelihood for the new caulking to retain good adhesion within the joints (e.g., new caulking would not be power washed soon after application).

#### Modification Rationale

A discussion of the rationale to modify the current sequence of work follows:

- **Pressure Washing New Caulking:** To avoid compromising the newly installed caulking, the Contractor would be required to endure a one to two week cure time before the newly sealed joints could be safely pressure washed. In addition, the washing operation would need to be conducted very cautiously along the linear length of the sealed joints. Pilot testing in a small area indicated that this action would take longer than normal washing activities due to this condition.
- **Paint Stripping at Balconies:** The underside of each balcony is currently coated with a layer of paint that must be removed via washing before applying new coatings. Caulking removal and

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<sup>1</sup> The Notification consists of the information submitted by Woodard & Curran to satisfy the requirements under 40 CFR 761.61(c), 761.62, and 761.79(h). Information was received dated February 16, 2010 (Building A Plan); April 6, 2010 (Buildings B, C, X Plan); April 9, 2010 (e-mail clarification); April 29, 2010 (certifications); May 13, 2010 (contractor workplan); and, June 2, 2010 (response contractor workplan comments).



reapplication is completed before paint stripping, thus, the use of a paint stripper where the existing paint line meets the edge of new caulking may compromise the adhesion of the caulking at that edge as well as the architectural pre-tinted color of the caulking and/or epoxy.

- Concrete Patching:
  - Concrete patching under the current sequence of work is an important coordination item in the schedule – a color and texture match to the existing concrete must be made in order to satisfy the requirements of the Cambridge Historical Society. This matching can only be done after the washing step is complete;
  - The cure time of the concrete patches, which may be two to four weeks, will delay the schedule if it cannot be completed in advance of the most time critical work (completing each joint with two coats of epoxy and two beads of new caulking).

Although the power washing after new caulking was initially thought to be a workable condition, during implementation of the work, the Contractor is finding that this is not the case. In summary, the implementation of the power washing step until after new caulking installation will result in a potential to damage newly installed sealants as well as multiple re-mobilizations to complete work in areas where it could only be partially completed before power washing. If the power washing steps can be completed before any caulking removal work, the concrete patching and balcony paint stripping can be completed without the potential to compromise the new sealants and unnecessarily delay the work schedule.

#### Water Collection & Treatment System

As described in the Contractor work plan submitted to EPA on May 13, 2010 as well as schematics provided with the written response to comments on the work plan submitted to EPA on June 2, 2010, the power wash water containment system will collect wash water generated from power washing activities through a series of polyethylene sheeting constructed on the working platforms and ground surfaces adjacent to the buildings. The wash water will be pumped from the ground surface collection system, through a water treatment train (consisting of a 5 micron single bag filter, a series of two 200-lb carbon filters, and a final 1 micron single bag filter), and into a 4,000-gallon poly tank for temporary storage. The water will then be analyzed for PCBs to determine the concentration at the time of off-site disposal. The photo at right shows the treatment and storage system:





#### Pilot Testing Rinse Water Data

Rinse water collected from façade power washing has been sampled at two locations to date (in both cases, the water was collected and sent off-site for disposal without any on-site treatment [at the detected PCB concentration]):

- A small section of the east façade of Building B was power washed with PCB-containing caulking in place and a rinse water sample was collected from the containment system. The analytical result from this rinse water sample was reported with PCBs detected at 1.8 µg/L (minimum detection limit of 0.5 µg/L).
- A section on the south façade of Building A was power washed, where the PCB caulking had been removed, joints were encapsulated with two coats of Sikagard 62 epoxy, and new sealants were installed and cured. A rinse water sample was collected from the containment, and sampled for PCBs. The result from this rinse water sample was reported with PCBs detected at 4.8 µg/L (minimum detection limit of 0.5 µg/L).

While only two data points have been collected to date, it appears that the presence of PCB caulking may have a negligible effect on the amount of PCBs that are transferred to rinse water via power washing. Additional analytical data from the rinse water will continue to be collected regardless of the sequence of work.

Based on the information provided herein and because the building wash water will be collected and treated prior to off-site disposal, it is requested that the Approval be amended to allow for façade power washing to occur prior to the sealant removals.

If you have any comments, questions, or require further information, please do not hesitate to contact me at the number listed above.

Sincerely,

WOODARD & CURRAN INC.

Jeffrey Hamel, LSP, LEP  
Senior Vice President

cc: Karen Sardone, Harvard  
Chris Packard, JLL